Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-16, 26-27, 29 and 31 (canceled)

Claim 17 (previously amended): The implant material of claim 28, wherein the matrix material is composed of a tricalcium phosphate ceramic comprising crystallographically phase-pure α or ß-tricalcium phosphate ceramic with an interconnecting microporosity of 20-60% of its volume.

Claim 18 (previously amended): The implant material of claim 17, wherein the α- or ß-tricalcium phosphate ceramic has a primary particle size of 10-40 µm and causes no giant cell or connective tissue infiltration into the implant material.

Claim 19 (previously amended): The implant material of claim 17, wherein it is present in the form of an injectable suspension.

Claim 20 (currently amended): The implant material of claim 17, wherein the calcium phosphate matrix degrades over time to release the MP52 protein ~~or DNA encoding such MP52 protein~~ in a controlled retarded manner.

Claim 21 (previously amended): A process for the production of an implant material according to claim 28, the process comprising applying the MP52 protein in and/or on the calcium phosphate matrix as a solution in a solvent such that a homogeneous distribution of the MP52 protein in and/or on the calcium phosphate matrix is achieved.

Claim 22 (previously amended): The process of claim 21, wherein the solvent is removed by sublimation.

Claim 23 (previously amended): The process of claim 21, wherein the MP52 protein or DNA encoding such MP52 protein is concentrated by *in situ* precipitation from the solvent in the calcium phosphate matrix by admixing a precipitating solvent.

Claim 24 (previously amended): A pharmaceutical composition comprising an implant material according to claim 14 and a pharmaceutically and physiologically acceptable material.

Claim 25 (previously amended): A method of treating a disease which affects cartilage, bone, or cartilage and bone and/or damage to cartilage, bone, or cartilage and bone in a patient in need thereof, the method comprising implanting an implant material according to claim 28, into the patient.

Claim 28 (previously amended): An implant material suitable for cartilage, bone, or cartilage and bone growth comprising a matrix material which is composed of a crystallographically phase-pure calcium phosphate and applied in and/or on said matrix a cartilage inducing, bone inducing, or cartilage and bone inducing MP52 protein, wherein the MP52 protein is selected from the group consisting of

(a) a protein comprising amino acid 1 to 501, 28 to 501, 361-400 to 501, 381 to 501, 382 to 501, 400 to 500 of SEQ ID NO. 1,

(b) a protein according to (a) which is a homodimer, and

(c) a protein according to (b) in combination with a dimer of another protein of the TGF-β superfamily which shows cartilage or bone-inducing potential.

Claim 30 (previously amended): A method of inducing at least one of bone or cartilage growth in a patient in need thereof, the method comprising implanting an implant material according to claim 28 into the patient.

Claim 32 (previously amended): A method for the treatment of a bone defect or bone fracture, for application in the jaw region or dental region or for immobilizing movable bone parts in a patient, comprising implanting an implant material according to claim 28 into the patient.

Claim 33 (previously amended): The method according to claim 32, for the treatment of periodontosis.